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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,550	03/23/2004	Andrew R. Daniels	705560US3	2550

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DAIMLERCHRYSLER INTELLECTUAL CAPITAL CORPORATION  
CIMS 483-02-19  
800 CHRYSLER DR EAST  
AUBURN HILLS, MI 48326-2757

EXAMINER
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STRIMBU, GREGORY J

ART UNIT	PAPER NUMBER
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3634

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/806,550

Applicant(s)


Daniels et al.

Examiner

Gregory J. Strimbu

Art Unit

3634



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/1/04</u> . | 6) <input type="checkbox"/> Other: _____  |

***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. It is suggested that the applicant amend the title to include the disengageable gear train.

The disclosure is objected to because of the following informalities: "pin 72 and the moves" on line 19 of page 6 is grammatically awkward and confusing.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitations such as "said bracket assembly" on line 3 of claim 2 render the claims indefinite because they lack antecedent basis. Recitations such as "when said holding linkage engages said pin is in said holding notch" on lines 4-5 of claim 3 render the claims indefinite because they are grammatically incorrect and confusing. Recitations such as "pin" on line 3 of claim 7 render the claims indefinite because they lack antecedent basis. Note that claim 7 depends from claims 1 and 4-6 which do not set forth a pin. Recitations such as "a group comprising aluminum and zinc" on line 2 of claim 8 render the claims indefinite because the applicant has failed to use the proper Markush format for setting forth alternatives. Recitations such as "said motor vehicle" on line 2 of claim 9 render the claims indefinite because they lack antecedent basis.

Art Unit: 3634

The recitation of the specific elements of the vehicle on lines 2-6 of claim 9 render the claims indefinite because it is unclear if the applicant is setting forth the subcombination of a drive mechanism or the combination of a drive mechanism and a vehicle. Lines 1-2 of claim 9 imply the subcombination while the positive recitation of the specific elements of the vehicle implies the combination. Recitations such as "said latching assembly" on line 6 of claim 9 render the claims indefinite because it is unclear if the applicant is referring to the latch assembly set forth above or is attempting to set forth another element of the invention in addition to the one set forth above. Recitations such as "indicating" on line 25 of claim 9 render the claims indefinite because it is unclear what element of the invention the applicant is referring to. Recitations such as "as gas strut assembly" on line 4 of claim 12 render the claims indefinite because it is unclear if the applicant is referring to the gas strut assembly set forth above or is attempting to set forth another gas strut assembly in addition to the one set forth above.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Art Unit: 3634

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 2 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 6,270,147. Although the conflicting claims are not identical, they are not patentably distinct from each other because the linkage of U.S. Patent No. 6,270,147 comprises the linking arm, the pinion gear of U.S. Patent No. 6,270,147 comprises the gear train and the actuator lever of U.S. Patent No. 6,270,147 comprises the holding linkage.

Claims 4-10, 12, 14 and 15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 6,270,147, as applied to claims 1 and 2 above, in further view of Ciavaglia et al. Ciavaglia et al. discloses a switch (not shown, but see column 3, lines 57-58) and a sector gear 30 having a plurality of teeth, a gas strut assembly 40.

It would have been obvious to one of ordinary skill in the art to provide claims 1-17 of U.S. Patent No. 6,270,147 with a switch, a sector gear and a gas strut assembly, as taught by Ciavaglia et al. to provide for an accurate means for determining when the lift gate is in the closed position, to provide for a reliable drive connection between the lift gate and the motor, and to reduce the amount of electrical energy required to raise the lift gate.

With respect to claims 8 and 15, one of ordinary skill in the art is expected to routinely experiment with materials so as to ascertain the optimum or workable material for a particular use. Accordingly, it would have been no more than an obvious matter of

Art Unit: 3634

engineering design choice, as determined through routine experimentation and optimization, for one of ordinary skill to provide claims 1-17 of U.S. Patent No. 6,270,147 with an aluminum construction to reduce the weight of the drive mechanism.

Claim 13 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 6,270,147 in view of Ciavaglia et al., as applied to claims 4-10, 12, 14 and 15 above, in further view of Mitchell. Mitchell discloses a power drive mechanism comprising a spring 13 for biasing a gear train into a disengaged position.

It would have been obvious to one of ordinary skill in the art to provide U.S. Patent No. 6,270,147, as modified above, with a spring, as taught by Mitchell, to prevent the gear train from unexpectedly moving to the engaged position.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-10 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciavaglia et al. in view of Mitchell. Ciavaglia et al. discloses a power drive mechanism comprising a linking arm 36, a crank arm 30 pivotally connected with the linking arm, a mounted gear train 28, a drive motor 26 operatively connected with

Art Unit: 3634

the crank arm through the gear train, the crank arm having a sector gear (not numbered, but seen in figure 2), a mounting bracket 24, a motor controller (not numbered, but see column 3, line 42), a limit switch (not shown, but see column 3, lines 57-58), a gas strut assembly 40. Ciavaglia et al. is silent concerning a movable gear train.

However, Mitchell discloses a gear train (not numbered, but seen in figure 2) being movable between an engaged position and a disengaged position, the engaged position effecting a driving engagement between a drive motor 14 and a driven element 2, such that energizing the drive motor drivingly rotates driven element and the disengaged position disengages the drive motor from the driven element permitting movement of the driven element without backdriving the drive motor, an actuator 17 operatively connected with the gear train and being operable to effect the movement of the gear train, a holding linkage 11, 23 operatively connected between the gear train and the actuator to maintain the driving engagement once the actuator moves the gear train into the engaged position, the holding linkage comprising a holding link 23 and a connecting link 11, a switch 31 electrically communicating with the actuator and operatively associated with the crank arm, a spring 13.

It would have been obvious to one of ordinary skill in the art to provide Ciavaglia et al. with a pivotable gear train, as taught by Mitchell, to enable the connection and disconnection of the drive motor with the lift gate without the need for an expensive and easily worn clutch mechanism.

Art Unit: 3634

With respect to claims 8 and 15, one of ordinary skill in the art is expected to routinely experiment with materials so as to ascertain the optimum or workable material for a particular use. Accordingly, it would have been no more than an obvious matter of engineering design choice, as determined through routine experimentation and optimization, for one of ordinary skill to provide the bracket of Ciavaglia et al. with an aluminum construction to reduce the weight of the drive mechanism.

***Allowable Subject Matter***

Claims 3, 10 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record, absent applicant's own disclosure, fails to teach the entire combination of elements set forth in the claimed invention. Specifically, the prior art of record fails to teach a fixedly mounted pin and the holding link includes a slot having a holding notch, the holding link slidably receiving the pin in the slot for guiding movement of the holding link, such that when the pin is in the holding notch of the holding linkage, the holding linkage maintains the position of the gear train. See lines 1-6 of claim 3. The prior of record also fails to teach the holding linkage comprising a holding link and a connecting link, the holding link pivotally connected with the bracket assembly and the connecting link, the actuator includes a pivotally mounted actuating



Art Unit: 3634

link pivotally connected to the bracket assembly and the holding link. See lines 1-4 of claim 10.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dean is cited for disclosing a drive system for selectively driving a closure of a vehicle.

### ***Response to Arguments***

Applicant's arguments filed March 23, 2004 have been fully considered but they are not persuasive.

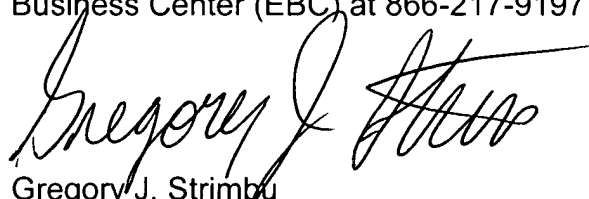
With respect to the applicant's arguments concerning Mitchell, the examiner respectfully disagrees. Claims 1 and 9 only require that the holding linkage is "operatively connected between said gear train and said actuator to maintain said driving engagement once said actuator moves said gear train into the engaged position". Claims 1 and 9 do not require the holding linkage to be the only element of the invention to maintain the driving engagement. Therefore, the combination of Ciavaglia et al. and Mitchell meet the limitations of claims 1 and 9 because the holding linkage 11 and 23 in combination with the actuator 17 maintain the driving engagement. Without the holding linkage 11 and 23, the actuator 17 would not be able to maintain the driving engagement. It is suggested that the applicant amend the claims to specifically set forth the element of the holding linkage which maintains the driving engagement.

Art Unit: 3634

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Strimbu whose telephone number is 703-305-3979. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Gregory J. Strimbu", is written over the printed name and title.

Gregory J. Strimbu  
Primary Examiner  
Art Unit 3634  
November 22, 2004